

## 2016 Presidential Migratory Bird Federal Stewardship Award *Winner!*

### Federal Aviation Administration: Protecting Migratory Birds through Revised Obstruction Lighting Standards

**Partner:** Federal Communications Commission

**Project Description:** The publication of FAA Advisory Circular 70/7460-1L, Obstruction Marking and Lighting, marks the culmination of a multi-year effort to significantly reduce mortality rates of

migratory birds resulting from collisions with communications towers. FAA standards for determining the proper way to light and mark obstructions affecting navigable airspace are used by the FCC, other federal agencies, and the private sector and influence lighting on tens of thousands of communications towers and other tall structures

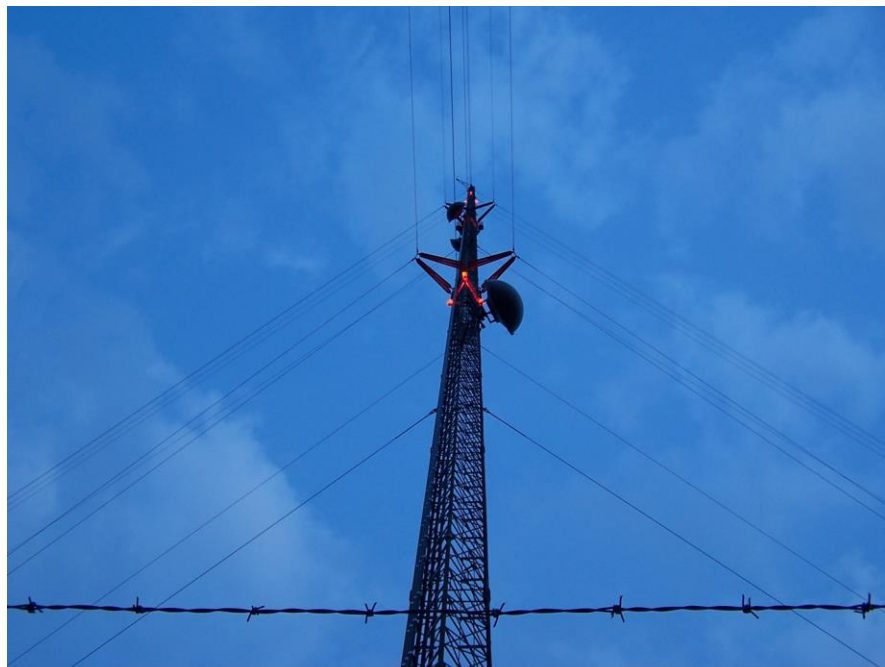


Photo credit: Joelle Gehring

throughout the U.S. Scientific studies estimate that almost 7 million migratory songbirds collide with communications towers in the U.S. during their spring and fall migrations. Wildlife biologists have concluded that migratory birds are attracted to lights used at night to warn pilots of a tower or other hazard, and appear to be more attracted to steady-burning (i.e., non-flashing) lights. Two hundred and thirty-nine species of birds have been documented as tower collision fatalities, predominantly night migrating songbirds, such as vireos, warblers, thrushes, and sparrows. However, shorebirds, waterfowl, woodpeckers, and raptors have also been detected as tower related fatalities. Tower fatalities have included 54 species considered to be Birds of Conservation Concern, one federally endangered species, and one species listed as endangered by the International Union for Conservation of Nature. The vast majority of species of concern are at risk for tower collisions and Longcore et al (2013) estimated that “13 of the 20 bird species killed most frequently by percentage of population are identified as either Birds of Conservation Concern or endangered.”

In response to requests from wildlife organizations, the telecommunications industry, and the FCC to redefine the standards for obstruction lighting to omit steady-burning lights, the FAA undertook an evaluation of alternative lighting configurations that led to these revised specifications. Based on that study, the FAA has issued revised specifications for obstruction lighting to eliminate the non-flashing lights on towers thereby reducing its attraction to migratory birds without compromising pilot safety. A comparative study of bird fatalities associated with communications towers suggests that these new lighting configurations could reduce bird collisions and resulting fatalities by 70% each year. Going forward, new and altered towers >150 ft. above ground level will be lit with only flashing lights, which the FCC considers to be a preferred lighting style. The FCC is strongly encouraging owners to extinguish non-flashing lights on towers built before the new FAA standards took effect and provides online guidance to tower owners on the process of changing lighting systems to the preferred lighting. Transport Canada is in the process of also changing their communications tower lighting requirements to be consistent with the U.S. FAA standards. These efforts will result in significant reductions in avian collisions with communications towers every year in the U.S. and Canada and prevent millions of avian fatalities, many of which are Birds of Conservation Concern.